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SUBSTANTIVE PREPARATIONS FOR THE CONFERENCE

Activities of the relevant organs, organizations
and bodies of the United Nations system in the
field of new and renewable sources of energy

Addendum

Report submitted by the
United Nations Development Programme *

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I. LEGISLATIVE MANDATE AND ENABLING RESOLUTIONS

1. The United Nations Development Programme was established on 1 January 1966, pursuant to the provisions of General Assembly resolution 2029 (XX) which merged the United Nations Special Fund 1/ and the Expanded Programme of Technical Assistance 2/ (EPTA). The mandate of the Special Fund was concerned with the provision of large-scale technical assistance, including experts, fellowships and equipment, to developing countries, which would be of immediate significance in accelerating their economic development, inter alia, facilitating new capital investment of all types by creating conditions which would make such investments either feasible or more effective. The EPTA, on the other hand, was concerned with the provision of technical assistance, consisting by and large of individual experts and fellowship programmes, to the developing countries. The separate characteristics of both programmes were merged into the United Nations Development Programme (UNDP) with a single pledging conference and the integration of the administration and management.

2. The unique feature of UNDP is its network of field offices in 113 countries and territories, each headed by a Resident Representative and staffed with development experts.

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1/ General Assembly Resolution 1240(XIII).

2/ General Assembly Resolution 304(IV).

3. The Governing Council of UNDP is composed of 48 member countries, representing both developed and developing countries. The Governing Council establishes for each recipient country the Indicative Planning Figure (IPF) for the programming cycle. The IPFs for the second cycle 1977-1981 are based upon an annual level of pledges at an anticipated growth rate of 14 per cent in Government contributions. It should be stressed that the IPF is a planning figure and that the level of the programme will be determined by the actual contributions received from member Governments of the United Nations. Similarly, the Governing Council establishes IPFs for intercountry projects on a regional, interregional and global basis. Governments themselves establish the sectoral priorities for the use of the IPF resources by formulating a Country Programme which normally covers a period of three to five years and which corresponds to the development needs to be financed by UNDP.

4. The guiding principles of UNDP provide that it should furnish assistance to Governments of developing countries for programmes and projects directed towards accelerating their economic and social development and the promotion of self-reliance in the country or countries concerned, including assistance in facilitating the investment of new capital. The following are illustrative of the type of activities in the energy field which are eligible for assistance for financing under the country, regional, interregional and global IPFs:

- (i) The identification of potential sites for the development of hydro-power;
- (ii) Surveys for the exploration and development of coal, uranium, geothermal energy, petroleum or natural gas, including heavy crudes and tar sands, (in the case of petroleum and natural gas, because of the high risk and cost involved, UNDP has not supported exploratory drilling);
- (iii) Studies aimed at assessing the potential of various energy resources, e.g. thermal, hydro, nuclear and geothermal power; woodfuel; wind, tidal and solar power, etc.;
- (iv) Studies directed towards the development and preparation of overall energy development plans and relevant legislation including the provision of advisory and consultant services as well as the training of the necessary personnel in order to carry out energy programmes;
- (v) Support towards research and development of various new and renewable energy sources such as wind, solar, biogas, and ocean energy, etc. Activities of a global nature involving research and development may be eligible for assistance under the global IPF;
- (vi) Assistance to the establishment of institutions for research, development, production and testing of power and transmission equipment, etc;
- (vii) Assistance in the planning and development for rural electrification and the development or promotion of small and low cost energy resources at the village level;

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- (viii) Regional and interregional training seminars, symposia and training institutions;
- (ix) Integrated river basin development involving the riparian countries for the overall utilization of the hydro-power potential.

5. At its twenty-seventh session, in June 1980, the Governing Council authorized the Administrator, on an interim basis, to seek and accept voluntary contributions in cash or in kind to undertake specific programmes and projects designed to meet urgent needs for assistance to developing countries, especially the poorest among them, in the energy sector, without prejudice to future arrangements which may result from the review of the United Nations Revolving Fund for Natural Resources and Exploration (UNRFNRE) and from the United Nations Conference on New and Renewable Sources of Energy. The Council emphasized the importance and desirability of utilizing such voluntary contributions to complement activities in the field of energy within country and intercountry programmes funded by the IPFs and other sources. The approval by the Council of this new energy account was a recognition that Governments of the poorest countries sometimes have urgent and pressing needs for financing, high-risk, capital-intensive projects in the field of energy development, which because of already heavy and planned commitments funded from the IPF, they are unable to meet. Further, the Council was informed by the Representative of the World Bank of its intentions to greatly increase its lending programme in the energy field over the next five years. Thus, there was a clear and identifiable need within UNDP for a facility to assist Governments of developing countries in project identification, as well as in carrying out pre-investment and feasibility studies which may lead to subsequent Bank capital financing.

6. It is expected that the resources of the account will be used for financing projects in petroleum and natural gas exploration, including heavy crudes and tar sands (but excluding the more capital intensive exploration drilling); survey of hydro-power sites; geothermal exploration; wind, tidal and solar power, including small pilot and demonstration plants for small-scale hydro, etc. The above listing is not exhaustive but is meant to be illustrative of the type of activities which will be financed from the Energy Account.

7. It is recognized that energy projects may cover a broad scope of activities which vary in their technical requirements. For example, some projects are research and development oriented whereas others involve more traditional exploration activities associated with finite natural resources.

8. The existing administrative and technical services of UNDP will be utilized in carrying out activities funded by the Energy Account. Close co-operation will be maintained with the World Bank, the United Nations system organizations and the various United Nations funds involved in the financing of energy projects. In the appraisal and implementation of the projects, special attention will be given to the use of consultative organizations and institutions, specializing in energy research and development.

9. The activities to be financed under the Energy Account are expected to complement

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those of the World Bank, which would consider follow-up investment, especially of energy projects in the area of high risk petroleum exploration, in the poorest of the developing countries and for regional projects.

10. In addition to being responsible and accountable for the utilization of the resources of UNDP, the Administrator has been assigned the responsibility for the management and operation of the following programmes which have as part of their mandate the funding of activities in the field of energy:

- (i) The United Nations Revolving Fund for Natural Resources Exploration (UNRFNRE);
- (ii) The United Nations Interim Fund for Science and Technology for Development (IFSTD); and
- (iii) The United Nations Capital Development Fund (UNCDF).

(a) The United Nations Revolving Fund for Natural Resources Exploration (UNRFNRE)

11. The Fund's basic legislation approved by General Assembly resolution 3167(XXVIII) defines the scope of its exploration activities as covering mineral, water and energy resources, and the types of assistance as covering: (i) preparation of requests; (ii) exploration of natural resources; and (iii) pre-investment studies, including feasibility studies. The Fund's operational mandate, as approved by the Governing Council at its twentieth session in June 1975 (E/5703/Rev.1, para 536) recognizes that all types of natural resources may be included within the scope of the Fund's activities, but, because of its initial limited resources limits it to exploration for solid minerals.

12. Under UNRFNRE, the recipient Government is expected to reimburse the Fund at a rate of 2 per cent of the annual value of produced commodities, payable at that rate for a period of 15 years up to a ceiling of 15 times the original investment.

13. At its twenty-sixth session in June 1979, the Governing Council was invited by the Administrator to examine the feasibility of extending the mandate of the Revolving Fund to include the exploration of geothermal energy. The Council did not pronounce itself on this issue. Thus, in the energy field the Revolving Fund has limited its operations to the exploration of coal and uranium.

14. In January 1981, a Working Group of Government Experts will examine the activities of the Fund, including the possibility of activating the original mandate of the Fund to cover energy and will also review the replenishment system. The Group will submit its report to the twenty-eighth session of the Governing Council in June 1981 and, subsequently, to the Economic and Social Council.

(b) The United Nations Interim Fund for Science and Technology for Development (IFSTD)

15. The United Nations Interim Fund for Science and Technology for Development was

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established for a period of two years, 1980 and 1981, as a result of the United Nations Conference on Science and Technology for Development held in Vienna in August 1979, and was approved by the United Nations General Assembly at its thirty-fourth session. The Interim Fund will provide technical and capital assistance in response to requests from Governments and groups of Governments for projects in the field of science and technology for development. The three broad objectives of the Fund are to support the efforts of the developing countries in strengthening their indigenous, scientific and technological capacities, to promote international co-operation in science and technology and, pending the establishment of a new financing system, to support activities which are needed to prepare for strengthened efforts in science and technology for development in the future.

16. The activities to be carried out by the Fund are specified in the Annex to General Assembly resolution 34/218 and include research, development, training, pilot production and demonstration in, inter alia, new and renewable sources of energy. The Interim Fund will operate in accordance with the general principles established by the General Assembly and with policy guidelines decided by the Intergovernmental Committee on Science and Technology for Development.

17. An intergovernmental group of experts is currently meeting on future institutional arrangements, including funding, for science and technology in the United Nations.

(c) The United Nations Capital Development Fund (UNCDF)

18. The United Nations Capital Development Fund, established by General Assembly resolution 2186(XXI) has as its mandate the facilitation of capital investment in such forms and on such terms as are compatible with the continued economic development in the assisted countries, taking due account of their balance of payments position and prospects. Since it became operational, UNCDF has provided first and foremost 3/ grant assistance to the least developed countries (LDCs) and to those countries which the United Nations General Assembly has designated may receive the benefits of the least developed countries' status. Within the mandate of UNCDF, the activities can be expanded provided the country meets the qualifications of having the LDC status, or is affected by economic difficulties similar to the LDCs. The projects, moreover, should provide direct and immediate benefits to the low income groups. Examples of projects in the energy field eligible for financing under UNCDF which normally should not exceed \$2 million include:

- small-scale hydro plants;
- wind and solar power;
- biogas;
- rural electrification networks.

Projects financed by the Fund are implemented by the Governments concerned. In some cases, a co-operating agency may be designated to assist or advise the Government in project implementation.

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3/ General Assembly resolution 3122 (XXVIII).

II. LONG-TERM OBJECTIVES AND MEDIUM-TERM PLAN

19. At its twenty-seventh session, in June 1980, the Governing Council established the IPFs for country, regional, interregional and global projects for the 1982-1986 planning cycle. The Governing Council, in establishing the IPFs for the next cycle, reiterated that the greatest share of UNDP technical assistance should be channelled to developing countries most in need, and decided that 81 per cent of the resources should be allocated to country IPFs and 19 per cent to the intercountry IPFs. Of the total amount available for country IPFs 80 per cent should be allocated to countries with a per capita GNP of up to \$500 and special treatment should be given by allocating higher increases in IPFs to low-income countries with a per capita GNP of \$250 and below. The remaining 20 per cent of the total country IPFs is to be allocated to countries with a per capita GNP of above \$500 in such a way that it would be more advantageous to countries in descending order of their per capita GNP. Based upon this distribution of resources and additional guidelines and criteria approved by the Council, illustrative individual country IPFs were established. Similarly, the Council established illustrative IPFs for regional, interregional and global programmes. The basis for these calculations assumed an annual growth rate in the resources of the programme of 14 per cent.

20. As has been pointed out in the previous section, Governments are invited to prepare a country programme for three to five years, corresponding to their high priority development needs for programmes and projects for which they expect to receive assistance from UNDP. In the preparation of the country programme, governments may call upon the assistance of the UNDP Resident Representative or the services of the relevant experts of the United Nations system organizations in identifying specific programmes and projects, including those in the field of new and renewable sources of energy. Thus it is the individual Governments themselves which identify and plan their long-term and medium-term development objectives, calling upon the services of the relevant United Nations system organizations where necessary and appropriate.

21. For regional and intercountry programmes and projects, the Governing Council has approved the convening of regional and subregional meetings in order to determine the priority areas of assistance. Representatives of Governments and the United Nations system organizations are invited to these meetings in order that all parties may have an input into the programming of the regional IPFs. The interregional and global IPFs are programmed through a similar procedure, except that the relevant consultations are carried out by UNDP headquarters. Through this consultative process, the long-term objectives of the countries, both on a regional and interregional basis, will be determined and UNDP resources will be allocated and planned accordingly.

22. In the case of projects submitted for financing under the United Nations Revolving Fund for Natural Resources Exploration, the United Nations Interim Fund for Science and Technology for Development, the United Nations Capital Development Fund and the new UNDP Energy Account, no long-term planning of the distribution of resources is foreseen. Programmes and projects will be approved based upon requests for assistance by the individual governments concerned, provided the project meets the relevant criteria for financial assistance.

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III. PROGRAMME AND BUDGET ACTIVITIES

23. In 1979, UNDP's expenditure on all programmed activities amounted to \$499.7 million, of which \$403.7 million was in respect of country projects, \$62.2 million for regional projects, \$6.9 million for interregional projects, \$9.9 million for global projects, \$2.5 million for project activities funded from the programme reserve; \$4.7 million from Special Industrial services; and \$9.8 million from the Fund for Special Measures for the Least Developed Countries. Individual Governments contributed to projects through cost sharing arrangements which amounted to another \$43.2 million. For the 1982-1986 programming cycle, based upon an annual growth rate of 14 per cent in contributions for planning purposes it is estimated that UNDP will finance a total IPF field programme in the amount of \$5 billion.

24. In addition, pledges in the amount of \$27.59 million have been received for 1981 in respect of the United Nations Capital Development Fund and several Governments have already announced or have signified their intention to contribute to the new Energy Account. The OPEC Special Fund has indicated that it will contribute 10 per cent of the funds received up to an amount of \$6 million for the Energy Account.

25. UNDP, as well as its predecessor organizations, have, since the early 1960s, approved a large number of projects concerned with hydropower development and significant investment has resulted from these studies. In the 1960s, UNDP provided considerable assistance for the exploration of geothermal energy and, more recently, UNDP assistance in new and renewable sources of energy has been expanded to include projects in the field of wind and solar power, biogas, investigations of tidal power and petroleum surveys for natural gas explorations (but not the more capital intensive exploratory drilling). UNDP, together with the United Nations Institute for Training and Research is co-sponsoring a United Nations Information Centre for Heavy Crudes and Tar Sands, the membership of which is open to Governments of developing countries, on the technology for exploitation of heavy crudes and tar sands. The UNDP Resident Representative will serve as the focal point in the country for contact with the Centre.

26. Currently, UNDP has under consideration a regional co-operative project for the Mediterranean in the field of renewable sources of energy. This project is concerned with the testing and demonstration of equipment, training, information exchange and special studies. Technologies to be demonstrated and tested include solar and wind power, desalination and biomass conversion.

27. On-going activities include a training institution in geothermal exploration for engineers and scientists at the University of Auckland, New Zealand. A further innovative project is the investigation of solar-powered water pumps for which the World Bank has been designated Executing Agency. Various projects have been approved and are operational and a listing is provided in the attached annex.

28. The United Nations Capital Development Fund is currently supporting a project for the utilization of waste wood in Samoa for the island of Savaii. A project in rural electrification is operational in Nepal for utilization of the output of five small hydro-power plants.

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29. The United Nations Interim Fund for Science and Technology for Development is currently appraising a number of requests from Governments for research and demonstration in new and renewable sources of energy.

30. In order to make countries and the financial institutions more readily aware of the investment requirements of development in the energy field, UNDP has funded, with the World Bank as Executing Agency, a 60-country survey of energy requirements. It is expected that this project could lead to the identification of further opportunities for UNDP pre-investment studies and to World Bank capital investment in specific energy projects. While this listing of activities is not complete, it does serve to highlight the range of activities which UNDP and its related programmes have currently operational or under active consideration for financing. The limitation on expanding the programme is a financial one as UNDP has the administrative structure and field network to handle a much greater volume of project activities, including the energy field.

IV. CONCLUSION

31. The various financial facilities now managed by UNDP and described above cover all the areas needed to facilitate development in the field not only of new and renewable sources of energy but in all other aspects of energy, except large-scale capital financing. This area extends from basic and applied research to exploration and small-scale capital projects.

32. UNDP stands ready to co-operate fully in the preparations for the Conference and in carrying out the recommendations of the Conference adopted by the General Assembly.

ANNEX

UNDP PROJECTS IN NEW AND RENEWABLE SOURCES OF ENERGY

<u>Symbol</u>	<u>Fund-</u> <u>ing</u>	<u>Agency</u>	<u>Project Title</u>	<u>Start</u> <u>Date</u>	<u>Compl.</u> <u>Date</u>	<u>UNDP Contribution (US \$)</u>				
						<u>Total UNDP</u> <u>Contribution</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
AFG-78-021	IPF	FAO	Biogas Tech. Res.	1/78	1/81	150,900	0	0	20,747	4,323
AFG-79-801	SIS	UNIDO	Utilis. of Solar Energy	4/79	4/80	10,000	0	0	0	10,000
ALG-75-038	IPF	UNESCO	Energie Solaire	10/77	80	204,200	0	3,138	64,480	47,600
BEN-76-005	LDC	FAO	Ressources Forestieres	1/77	1/82	395,906	70,053	84,616	101,852	109,140
BEN-77-806	LDC	UNIDO	Solar Salt Production	4/79		30,568	0	0	17,068	13,500
BRA-77-008	IPF	DPOPE	Studies on Non-Petro. Fuels	7/77	9/77	7,362	7,362	0	0	0
BUL-77-004	IPF	UNESCO	Physics of Semi- Conductors	4/77	1/80	7,900	0	1,892	0	6,008
BZE-79-001	IPF	UN	Energy Development	6/79	1/83	330,000	0	0	5,651	115,832
CHI-77-005	IPF	UN	Experto En Energia Geo.	12/78	8/80	1,774	2,604	-830	0	0
CKI-79-802	SIS	UNIDO	Availability of Energy Sources	1/80	2/80	8,500	0	0	0	8,500

<u>Symbol</u>	<u>Fund-</u> <u>ing</u>	<u>Agency</u>	<u>Project Title</u>	<u>Start</u> <u>Date</u>	<u>Compl.</u> <u>Date</u>	<u>UNDP Contribution (US \$)</u>				
						<u>Total UNDP</u> <u>Contribution</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
CMR-77-027	IPF	FAO	Utilis. Du Charbon	9/79	12/80	136,000	0	0	66	84,534
COL-76-002	IPF	DPOPE	Las Gaviotas	11/76		271,818	62,516	173,900	35,402	0
CPR-79-023	IPF	UN	Wind Power Station	12/79	1/82	93,000	0	0	3,410	85,000
CUB-78-802	SIS	UNIDO	Solar Energy Mission	9/78		10,653	0	11,124	-471	0
CUB-79-801	SIS	UNIDO	Chauffe Eau Solaire	1/79	1/80	20,500	0	0	20,500	0
DJI-78-005	IPF	UN	Tests on Geo. Fluids	79	12/80	571,000	0	0	1	570,999
DOM-77-002	IPF	FAO	Sugarcane for Biogas, etc.	3/78		308,028	0	58,650	52,394	126,425
ETH-72-002	IPF	UN	Geo. Investigations	12/73		464,952	61,918	91,497	8,867	7,200
ETH-77-013	IPF	UNIDO	Water Pumping Tech.	7/77		388,954	12,212	46,703	63,789	107,300
ETH-78-007	IPF	UN	Geothermal Resources	10/78	1/83	1,815,588	0	20,814	-5,713	1,248,194

<u>Symbol</u>	<u>Fund-</u> <u>ing</u>	<u>Agency</u>	<u>Project Title</u>	<u>Start</u> <u>Date</u>	<u>Compl.</u> <u>Date</u>	<u>UNDP Contribution (\$)</u>				
						<u>Total UNDP</u> <u>Contribution</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
ETH-78-027	IPF	ITU	Rural Radio Call Services	12/78		499,923	0	0	368,592	131,331
ETH-78-007	IPF	UN	Geothermal Resources	10/78	1/83	1,815,588	0	20,814	-5,713	1,248,194
GHA-74-013	IPF	FAO	Forest Energy Res.	9/74	1/82	2,561,641	399,336	339,785	613,965	542,700
GLO-78-004	IPF	WORLD BA	Solar-Powered Pumping	6/78		1,695,000	0	575	208,077	1,040,000
GLO-79-006	IPF	DPOPE	Non-Conventional Energy Study	6/79	1/81	25,000	0	0	17,512	7,488
GRE-76-003	IPF	UN	Solar Energy	1/77	2/77	2,835	2,835	0	0	0
GUA-74-009	IPF	UN	Geothermic Resources	2/75	12/78	3,467	0	3,467	0	0
HAI-78-008	IPF	WMO	Wind Power for Irrig.	2/78	3/78	5,883	0	5,883	0	0
IND-75-030	IPF	DPOPE	Solar Energy Utiliz. in Agriculture	7/76	12/78	5,044	49	0	0	0
INT-76-007	IPF	DPOPE	Geothermal Power	4/77	11/80	688,843	9,123	63,548	187,896	177,509

<u>Symbol</u>	<u>Fund-</u> <u>ing</u>	<u>Agency</u>	<u>Project Title</u>	<u>Start</u> <u>Date</u>	<u>Compl.</u> <u>Date</u>	<u>UNDP Contribution (\$)</u>				
						<u>Total UNDP</u> <u>Contribution</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
INT-79-023	IPF	DPOPE	UNITAR Conf. on Energy	11/79	1/80	25,000	0	0	25,000	0
JOR-76-004	IPF	UN	Geothermal Exploration	8/77	3/80	87,052	33,658	36,499	-3,605	20,500
JOR-77-802	SIS	UNIDO	Assist. to Solar Energy	10/78	11/78	2,393	0	2,393	0	0
KEN-70-525	IPF	UN	Geo. Investigations	5/70		1,508,643	29,194	19,607	3,162	28,000
KEN-75-010	IPF	UNIDO	Water- Lifting Devices, Wind	5/78	5/82	119,061	0	4,415	55,896	58,750
KEN-75-802	SIS	UNIDO	Wind-Powered Solar Pumping	7/75		42,946	42,946	0	0	0
MAG-77-014	IPF	UN	Ressources Geother- miques	9/78	1/81	81,500	0	9,305	47,655	24,540
MAR-79-003	IPF	UN	Wind & Solar Power Resources	1/80	1/82	39,000	0	0	0	31,000
MEX-77-014	IPF	UNESCO	Investigacion en Energia Solar	9/78	2/82	381,800	0	900	150,154	118,846
MEX-78-004	IPF	UN	Geo. Exploration	10/78		857,500	0	3,125	261,245	397,029

<u>Symbol</u>	<u>Fund-</u> <u>ing</u>	<u>Agency</u>	<u>Project Title</u>	<u>Start</u> <u>Date</u>	<u>Compl.</u> <u>Date</u>	<u>UNDP Contribution (\$)</u>				
						<u>Total UNDP</u> <u>Contribution</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
MEX-78-008	IPF	UNESCO	Captacion de la Energia Solar	6/78	12/81	398,900	0	6,953	135,225	116,300
MLI-77-C09	CDF	OPE	Solar Energy Deep Wells	8/80	83	898,000	0	0	0	137
MON-75-006	IPF	UN	Water, Wind and Solar Energy	9/78	1/83	994,625	0	8,305	60,200	572,354
MOR-79-004	IPF	DPOPE	Conversion des Rayons Solaire	3/79	79	14,129	0	0	14,129	0
NEP-76-C31	CDF	DPOPE	Phewa Tal Dam	12/76	81	2,751,000	358,536	522,696	688,263	565,236
NEP-78-C03	CDF	DPOPE	Rural Electrification	1/80	82	1,915,000	0	0	0	146,100
NIC-74-003	IPF	UN	Geothermal Resources	8/74	1/78	85,514	2,868	0	0	0
PAK-75-027	IPF	UN	Rural Energy Deve.	1/79	1/81	47,000	0	0	34,396	12,604
PHI-78-803	SIS	UNIDO	Pyrolitic Converter Assistance	1/78	1/80	72,081	0	37,081	35,000	0
PNG-78-802	SIS	UNIDO	Solar Salt Production	1/78	1/80	10,200	0	810	9,390	0

<u>Symbol</u>	<u>Fund-</u> <u>ing</u>	<u>Agency</u>	<u>Project Title</u>	<u>Start</u> <u>Date</u>	<u>Compl.</u> <u>Date</u>	<u>UNDP Contribution (\$)</u>				
						<u>Total UNDP</u> <u>Contribution</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
RAB-79-021	IPF	DPOPE	Sources of Energy	9/79	1/81	64,750	0	0	21,180	43,570
RAF-74-045	IPF	DPOPE	Sahelian Solar energy	8/76		149,097	-1,519	4,878	94,200	0
RAF-74-308	IPF	FAO	Reforest. - SEN/73/012	10/74	1/80	388,816	12,409	80,458	70,060	0
RAS-79-020	IPF	ESCAP	Alternative Sources of Energy	8/79	1/81	38,300	0	0	33	38,267
RAS-79-062	IPF	UN	Energy Matters	5/79	10/79	23,466	0	0	23,466	0
RAS-79-068	IPF	UN	Future of Heavy Crude/ Tar Sand	6/79	7/79	5,197	0	0	5,197	0
RER-75-026	IPF	DPOPE	Solar Energy Dev	11/75	12/79	35,808	1,510	41,542	-8,111	0
RER-79-020	IPF	DPOPE	Renewable Sources of Energy	9/79	1/81	57,250	0	0	2,000	55,250
RLA-74-030	IPF	DPOPE	Nuevas Fuentes Renovables	4/77	1/81	425,635	41,216	175,712	175,509	33,198
RLA-76-012	IPF	UN	Central American Energy Programme	8/77		1,302,576	0	158,009	0	1,044,767

UNDP Contribution (\$)

Symbol	Fund- ing	Agency	Project Title	Start Date	Compl. Date	UNDP Contribution (\$)				
						Total UNDP Contribution	1977	1978	1979	1980
ROM-76-008	IPF	UN	Geothermal Resources	11/77		50,000	0	12,166	5,169	32,665
RWA-76-010	IPF	UNIDO	Exploitation de la Tourbe	10/77	1/80	17,204	0	16,872	332	0
SAM-78-001	IPF	OPE	Wood-based Rural Electricity	12/78		360,188	0	35,199	141,443	77,057
SAM-78-C01	CDF	OPE	Rural Electrification	5/80	82	1,374,000	0	0	0	0
SEN-78-002	IPF	FAO	Mise en Valeur des Forets	8/79	12/81	317,300	0	0	0	143,100
THA-77-010	IPF	UN	Small Hydropower Dams	10/79	1/83	1,084,954	0	0	40	261,116
THA-79-801	SIS	UNIDO	Techno-Econ. Mission	1/79	1/80	50,000	0	0	50,000	0
TOK-79-001	IPF	DPOPE	Provision of Wind Generators	7/79	1/81	7,400	0	0	5,636	1,764
TUR-75-064	IPF	UN	Solar Energy	5/77	1/82	74,842	0	6,060	-4,821	19,563
Total Projects as of 1/12/80						28,688,954	1,148,826	2,108,561	3,875,815	9,503,490